



Development of a new fire protection for paper-based materials by a flame-induced insulation-forming coating layer IntumesCoat



Papiertechnische Stiftung PTS
Fraunhofer Institute for Chemical
Technology ICT, Energetic Materials

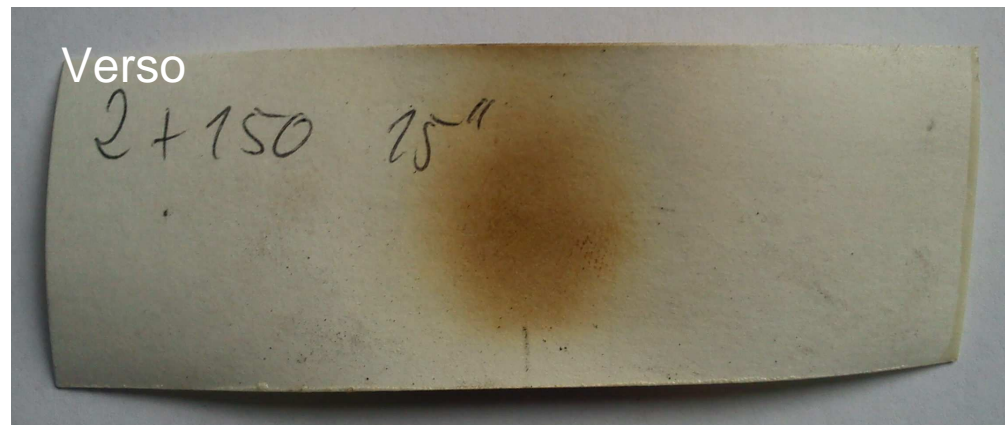
Because such things happen...



Source: M. Hageböck, PTS Fibre Technology Symposium,
Dresden, 22-23 Nov. 2011



Coat expansion by exposure
to a flame



Project details

Project coordinator	PTS
Other applicants	Belgium? Others?
Sector	Paper industry/other industries
Call of Interest	<input checked="" type="checkbox"/> CORNET <input type="checkbox"/> EraSME
Proposal summary:	Development of a new fire protection for paper-based materials by a flame-induced insulation-forming coating layer which may be applied to a great variety of paper-based substrates and may be printed on them.
Advantages for SMEs, trade or industry:	<ul style="list-style-type: none">➤ New knowledge on novel, flame resistant paper materials➤ Basis for such coating formulations, especially for specialty applications➤ Benefits to printers and paper processing packaging industry due to new possible applications
Profile of partners sought:	Research institutes working on any aspects of fire protection which may also relate to paper and board SMEs interested in market implementation

What technology and/or application field is addressed?

- Fire protection systems in the paper and packaging industry, related industrial sectors and others

State of the art

- To date, fire protection of paper-based materials is achieved by adding additives to the paper and by means of sizing which may be critical as far as price and environmental recyclability issues are concerned

What are the major objectives and outcomes of the new project?

- Development of a versatile environmentally friendly fire protection coating which can also be applied by printing
- Cost efficient application of the coating on paper-based substrates

Who are the actors in the project?

- Associations, research providers, SMEs with interest/experience in specific sectors, fire protection associations, paper and board producers, packaging producers, specialty printers
- In the implementation of new products for the market and their further development to date, 3 partners from Germany and 1 partner from Belgium have indicated their interest in participating: speciality materials manufacturers, speciality chemicals producers and fire protection engineering consultants, which are all SMEs

What is the benefit for participating SMEs/Associations?

- Access to newly acquired knowledge on novel, flame resistant paper materials
- New basis for such coating formulations, which are interesting to SMEs, especially for specialty applications
- Benefits for printers and paper processing packaging industry as a result of new possible applications due to the flame resistant function (e.g. packaging of fire-prone goods)

What are the estimated costs and duration of the project?

24 months, approx. EUR 700k – 900k

Contact details

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